



Book Reviews

All reviews are prepared on invitation. Unsolicited reviews cannot be accepted. Opinions expressed are entirely those of the reviewers.

Measurement of the Health Benefits of Investments in Water Supply. (Report of an Expert Panel to the International Bank for Reconstruction and Development, May 5-7, 1975.) Report No. PUN 20, International Bank for Reconstruction and Development, Public Utilities Department, 1818 H Street, NW, Washington, D.C. 20433. 12 pp, 1976, free on request.

Practitioners in the field of water supply for several centuries have confronted themselves with the desire and the hope that health benefits were not only obvious and epidemiologically verifiable, but might in fact be quantitatively demonstrable. At one time or another, all of us engaged in this exercise, while some of us gave up and fell back upon the position that "water was good for people." For some decades, I insisted upon this axiom as a matter of principle and conviction!

The International Bank workers, beleaguered by many demands upon them for limited loan funds, searched for more specific indicators of water and well being. They pursued the subject in these words:

"For thirteen years the International Bank for Reconstruction and Development has been engaged in investments in water supply, following the principles outlined in the sector paper on water supply and sewerage and the policy paper on the health sector. Throughout this period there has been a search for reliable procedures for estimating and predicting the health effects likely to result from such investments. Most workers in the health field have accepted that benefits ensue from the provision and use of potable water. These benefits, however, have not been quantified to permit the derivation of reliable formulas which can be used to predict the public health effects of water supply projects coming before the Bank."

The document here reviewed is the result of detailed exploration of the subject by a panel in medical epidemiology, sanitary engineering and economics. The findings, here paraphrased, are of importance to those engaged in the continuing struggle to provide

water for drinking, cooking and bathing for hundreds of millions of people throughout the world. They now have minimum amounts, almost universally unsafe.

As one might predict, the Panel was unanimous in the conclusion that "Other things being equal, a safe and adequate water supply is generally associated with a healthier population." On the other hand, the identification of water with specific health benefits was fraught with difficulty, if not a futile search. This is due to the fact that, simultaneously with the introduction of a safe and sufficient water supply, governmental, physical, environmental, economic, cultural and educational factors are in flux. All of these have significant impacts upon disease and health. Isolation of the water factor alone becomes difficult.

The need of the Bank and governments remains for greater insight into the extent to which disease may be reduced by various measures. The Panel has suggested, therefore, that the Bank undertake a few, relatively modest, studies in different regions, in which only one or two specific diseases, now heavily prevalent, might be closely followed for some years to come.

The monograph, recently released by the Bank, embodies a thoughtful reconnaissance of public health experience, with particular reference to the epidemiologic consequences of the introduction of water and other sanitary facilities. That the Panel arrived at less than a definitive formula for a cost-benefit criterion is simply a reflection of the complexity of the issues, once the assignment was clearly identified. Anyone engaged in this public health activity will find detailed examination of the document highly profitable.

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Living in the Environment: Concepts, Problems, and Alternatives. G. Tyler Miller, Jr. Belmont, CA: Wadsworth Publishing Company, Inc., 1975, 600 pp, \$20.

Living in the Environment: Concepts, Problems, and Alternatives offers to the public health professional a new handle to relate to the complex myriad of problems today. For years ecology books catalogued catastrophes. This book goes much further. In the first half it develops concepts of ecology, population, resources, pollution, and poli-